



# **Green Building & Low Impact Development**

## **• FREQUENTLY ASKED QUESTIONS •**

***Visit the DDES Web site at  
[www.metrokc.gov/ddes](http://www.metrokc.gov/ddes)  
for more information***

DDES Customer  
Information Bulletin #

# **55**

King County DDES has created customer information bulletins to inform the general public about the effect of codes and regulations on their projects. These bulletins are not intended to be complete statements of all laws and rules and should not be used as substitutes for them. If conflicts and questions arise, current codes and regulations are final authority. Because the codes and regulations may be revised or amended at any time, consult King County staff to be sure you understand all requirements before beginning work. It is the applicant's responsibility to ensure that the project meets all requirements of applicable codes and regulations.

For alternate formats, call 206-296-6600.

## **Introduction**

The purpose of this bulletin is to assist individuals with implementing green building and low impact development practices for all types of projects including: new and remodeled single-family and multifamily housing, commercial buildings, and neighborhood developments such as plats and short plats.

King County encourages sustainable development and green building practices to help balance growth with protection of our region's valuable natural resources. County incentives for builders and developers to use sustainable development techniques include free consultations and fee discounts. More information is online at <http://dnr.metrokc.gov/topics/sustainable-building/>, and [streaming video](#) of the June 2005 Open House to announce King County's incentives to "build green" also is available [online](#) (requires free [RealPlayer](#)).

By promoting and supporting green building and low impact development in projects permitted through the Department of Development and Environmental Services (DDES), King County can help builders and developers create communities that are healthy for families and for our Northwest environment.

Customers can get information about green building practices by coming to the DDES Permit Center in the Building Services Division of DDES, 900 Oakesdale Avenue SW, Renton, or by calling the Department of Natural Resources and Parks Green Building Program at 206-296-4466.

## **COMPREHENSIVE PLAN POLICY:**

In 2004, the King County Comprehensive Plan was updated with a new section on sustainable development (see Chapter II Section VI). This document, which guides policy for all land use and development regulations in unincorporated King County, states the county's commitment to encourage, support and promote the application of sustainable development practices in all private sector development.

### What is green building and low impact development?

**Green building**, or sustainable building, is defined by King County as design, construction and operation practices that significantly reduce resource consumption and environmental impacts through:

- Sustainable site planning;
- Energy efficiency;
- Water conservation;
- Waste minimization;
- Pollution prevention;
- Using resource-efficient materials; and
- Providing enhanced indoor environmental quality for occupants.

**Low Impact Development (LID)** is an approach to land development that focuses on how water enters a site, is stored on-site, and leaves a site. Land development that incorporates LID practices minimizes impervious surface, protects and enhances native vegetation and soils, and manages stormwater at its source. King County's new stormwater code and the *2005 Surface Water Design Manual* provide a number of tools that make it easier to use a LID approach. The new stormwater tools can be found in Appendix C of the *2005 Surface Water Design Manual*, where they are called "flow control BMPs". Appendix C of the manual is available online at [http://dnr.metrokc.gov/wlr/dss/DMUpdates/Appndx\\_C.pdf](http://dnr.metrokc.gov/wlr/dss/DMUpdates/Appndx_C.pdf).

### What are the benefits of green building and low impact development?

There are many reasons why builders and developers choose green building and low impact development. These include:

**Cost Savings:** Developers are realizing reduced infrastructure costs associated with LID design strategies, building operators find significantly lower operating costs with energy and water efficient systems, and homeowners choose durable products that lower repair and replacement costs over the life of a building. In addition, construction practices such as recycling and preventing jobsite waste further reduce project costs. Though green building doesn't mean higher costs or complicated permitting, green building does require smart decisions during design, permitting and construction that sometimes involve upfront investments that pay future dividends.

**Healthy & Safety:** Americans spend the majority of their time indoors. Studies done by the U.S. Environmental Protection Agency have shown that indoor pollutant levels may be 2-5 times higher than outdoor levels. Green buildings typically offer healthier and more appealing living and work environments for residents or tenants. Strategies to improve indoor environmental quality include choosing low or non-toxic building materials, maximizing natural ventilation and daylighting, and enhancing productivity and comfort for building occupants.

**Added Value:** Green builders and developers are finding a marketing edge as consumer demand for energy efficiency and durable products increases. In fact, research shows home buyers are willing to pay more for green features, especially those that promise substantial savings on utility and maintenance costs. New financing options are available to homeowners for energy and resource-efficient home improvements, and innovative lending options promote homeownership in neighborhoods near public transit by offering location efficient mortgages.

*Ecological Benefit:* Low impact development, such as carefully siting buildings, minimizing impervious surfaces, and infiltrating runoff, helps to preserve wildlife habitat, decrease stormwater runoff and prevent erosion that can destroy aquatic systems. Using less water, energy and natural resources, and avoiding toxic chemicals prevents pollution, reduces waste and decreases the strain that we place on the environment.

### How can King County help green builders?

- **Dedicated Green Track for green building and low impact development projects.** Building and development proposals in this track are assigned to a green team, composed of selected King County staff with expertise in alternative green design and construction techniques and Built Green™ and Leadership in Energy and Environmental Design (LEED™) programs. The green team will offer assistance to DDES customers on sustainable development techniques including but not limited to:
  - Green (vegetated) roofs;
  - Alternative energy systems such as solar, wind and geothermal;
  - Rain water collection systems;
  - Resource efficient framing;
  - Recycled materials; and
  - Low impact development.
- **Customized review schedule with an assigned project manager, at no extra charge, for residential projects achieving a Built Green™ five-star rating.** The DDES Project Manager provides customers with a single point of contact to help keep the review process efficient, predictable and coordinated. To find out if your project qualifies, contact 206-263-6037.
- **Free green building technical consulting service on Tuesdays 8:30-10:30 a.m.** at the DDES Permit Center, or by appointment by contacting the King County Green Building program at 206-263-6037 or [katie.spataro@metrokc.gov](mailto:katie.spataro@metrokc.gov).
- **Free low impact development consulting services by appointment.** Simply contact the King County Stormwater Services Section at 206-296-1973 or [steve.foley@metrokc.gov](mailto:steve.foley@metrokc.gov).
- **Cost-sharing and fee discounts are available for use of low impact development best management practices (BMPs).** Cost sharing is available for sites that convert existing impervious surfaces to native-vegetated landscape, compost-amended lawn or grass, or modular-grid pavement. Surface water fee discounts are available for both residential and commercial sites that incorporate BMPs, use pervious pavement, or install stormwater flow control or water quality treatment facilities. More information is available at <http://dnr.metrokc.gov/wlr/surface-water-mgt-fee/swm-discount.htm>.
- **Product displays** in the DDES Permit Center lobby and on-site demonstration gardens at DDES main offices, 900 Oakesdale Ave. SW in Renton.
- **Rebate and incentives information.** Simply call King County Green Building and Construction Recycling Assistance at 206-296-4466.
- **Professionally facilitated planned meetings** for construction project teams to identify green building goals early in the design process.
- **Technical assistance regarding deconstruction and recycling of construction wastes.** Simply call King County Green Building and Construction Recycling Assistance at 206-296-4466.

### Certification for green buildings

Three programs are available locally to provide standardized methods for measuring a building's environmental performance. Rating systems like Built Green™ and LEED™ can provide guidance and insight to a project team on how to integrate green building elements from the start of a project and to help ensure these features are carried through the construction phase. While not every project will be able to meet the criteria of these programs, even small changes to a building design or construction practices can add up. Certifying projects, however, helps builders and developers market their projects and makes a positive impression on consumers who seek homes or office spaces that are environmentally friendly.

- **Built Green™** is a rating system for single and multifamily residential developments and remodeling projects.
- **Leadership in Energy and Environmental Design (LEED™)** is an environmental rating system for commercial projects and multifamily construction over four stories.

New Washington state legislation requires any state-funded project greater than 5,000 square feet to be built and certified to a LEED™ Silver standard. New construction and major models of K-12 schools have the option of meeting the LEED™ standard or using the Washington Sustainable Schools Protocol. This requirement also will take effect in July 2008 for all state-funded affordable housing projects.

- **Construction Works** is a recognition program for residential or commercial contractors that offers free technical assistance on reducing waste recycling and using recycled content building materials.

**Other bulletins that may be helpful**

|              |   |
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| Bulletin 3   | Demolition Permits for Commercial and Residential Structures    |
| Bulletin 8   | Commercial and Multifamily Building Permits                     |
| Bulletin 9   | Obtaining a Residential Building Permit: Submittal Requirements |
| Bulletin 12  | Residential Building Permit Process                             |
| Bulletin 27  | Residential Energy Codes  |
| Bulletin 34B | Surface Water Design Manual Variances or Adjustments            |
| Bulletin 37  | Water Problems  |
| Bulletin 45A | Zoning Code: Recyclables  |

**Other telephone numbers that may be helpful**

|              |  |
|--------------|--|
| 206-296-6600 | DDES Information   |
| 206-296-6600 | DDES Site Development Services                                   |
| 206-296-6630 | DDES Building Inspection Services                                |
| 206-296-4466 | King County Green Building and Construction Recycling Assistance |

**Web resources that may be helpful**

King County Green Building Program  
[www.metrokc.gov/dnrp/swd/greenbuilding](http://www.metrokc.gov/dnrp/swd/greenbuilding)

Built Green™ Program  
[www.builtgreen.net](http://www.builtgreen.net)

U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED™) standard  
[www.usgbc.org/LEED](http://www.usgbc.org/LEED)

Washington Sustainable Schools Program  
[www.k12.wa.us/SchFacilities/SustainableSchools.aspx](http://www.k12.wa.us/SchFacilities/SustainableSchools.aspx)

Northwest EcoBuilding Guild  
[www.ecobuilding.org](http://www.ecobuilding.org)

Buildgreen NW  
[www.buildgreennw.com/](http://www.buildgreennw.com/)

**Be sure to visit our Web site at:**  
[www.metrokc.gov/ddes](http://www.metrokc.gov/ddes)



King County complies with the Americans with Disabilities Act (ADA). If you require an accommodation to attend a meeting (two weeks' notice) or require this information in Braille, audiocassette, or large print, please call 206-296-6600 or TTY 206-296-7217.